

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Tomoyuki NAKANO et al.
Appl. No.	: 11/508,969
Filed	: April 8, 2005
For	: BULKY PAPER
Examiner	: Dennis R. Cordray
Group Art Unit	: 1731

SUPPLEMENTAL DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is a Declaration supplemental to the Declaration under 37 C.F.R. § 1.132 dated September 26, 2007 for this application.

1. I, Tomoyuki Nakano, a co-inventor of the above-identified application, submitted the Declaration dated September 26, 2007 and hereby declare as follows:

2. The amphoteric polyacrylamides used in Examples 1 and 2 and Comparative Examples 1 and 2 had the following electric charges at pH 2 and at pH 12.

	Average Molecular weight	Electric Charge at pH 2 (positive potential) [m-equivalent/g]	Electric Charge at pH 12 (negative potential) [m-equivalent/g]
Ex. 1	2,800,000	0.73	1.06
Ex. 2	3,800,000	0.85	1.22
Com. Ex. 1	2,000,000	0.55	1.31
Com. Ex. 2	4,500,000	1.01	1.57

3. The density, breaking length, hunter brightness, and hunter opacity of the paper sheets obtained in Examples 1 and 2 and Comparative Examples 1 and 2, which are

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shown in the Table in paragraph 16 on page 3 of the Declaration of 9/26/07, were average values calculated as follows:

Density: The average weight of 10 sheets divided by the average thickness of about 10 locations.

Breaking length: The average value of 6 locations.

Hunter brightness and opacity: The average value of 4 to 5 locations.

4. The measuring errors of density and breaking length, including individual variations and instrument errors, are expected to be  $\pm 2\%$  based on my experience. The measuring errors of hunter brightness and opacity, including individual variations and instrument errors, are expected to be  $\pm 0.2\%$  based on my experience.

5. The table shown in paragraph 16 on page 3 of the Declaration of 9/26/07 can be rewritten as follows:

	Average Molecular weight	Density (g/cm <sup>3</sup> )	Breaking Length (km)	Hunter Brightness (%)	Hunter Opacity (%)
Ex. 1	2,800,000	0.521 $\pm$ 0.01	3.25 $\pm$ 0.07	84.4 $\pm$ 0.17	85.5 $\pm$ 0.17
Ex. 2	3,800,000	0.523 $\pm$ 0.01	3.32 $\pm$ 0.07	84.3 $\pm$ 0.17	85.4 $\pm$ 0.17
Com. Ex. 1	2,000,000	0.528 $\pm$ 0.01	3.14 $\pm$ 0.06	84.1 $\pm$ 0.17	85.1 $\pm$ 0.17
Com. Ex. 2	4,500,000	0.535 $\pm$ 0.01	3.10 $\pm$ 0.06	83.9 $\pm$ 0.17	84.8 $\pm$ 0.17

6. Even after taking the errors into consideration, my statements in paragraphs 17-19 on pages 3-4 of the Declaration of 9/26/07 need not be changed. It is surprising that the paper sheets of Examples 1 and 2 show better breaking length despite the fact that their densities are smaller than those of Comparative Examples 1 and 2. Further, it is surprising that the paper sheets of Examples 1 and 2 show better hunter brightness and opacity than those of Comparative Examples 1 and 2. The differences in the values between Examples 1-2 and Comparative Examples 1-2 may appear to be small but skilled artisans in the field of bulky paper industry would agree that the differences are significant.

7. I hereby declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements

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and the like so made are punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Dated: \_\_\_\_\_

By: Tomoyuki Nakano  
Tomoyuki Nakano